

SGCN and Habitat Stressors

Level 1 Threat Residential and Commercial Development

Level 2 Threat: Commercial and Industrial Areas

Description: Factories and other commercial centres

Species Associated With This Stressor: **Total SGCN: 1: 20 2: 17 3:**

Class	<i>Actinopterygii</i> (Ray-finned Fishes)	SGCN Category
Species: <i>Alosa pseudoharengus</i> (Alewife)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Armored shores decrease available forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Species: <i>Alosa sapidissima</i> (American Shad)		1
Severity: Severe	Actionability: Actionable with difficulty	
Notes: Armored shores decrease available spawning, forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Species: <i>Acipenser oxyrinchus</i> (Atlantic Sturgeon)		1
Severity: Severe	Actionability: Actionable with difficulty	
Notes: Armored shores decrease available forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Species: <i>Alosa aestivalis</i> (Blueback Herring)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Armored shores decrease available forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Species: <i>Osmerus mordax</i> (Rainbow Smelt)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Armored shores decrease available forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Species: <i>Acipenser brevirostrum</i> (Shortnose Sturgeon)		1
Severity: Severe	Actionability: Actionable with difficulty	
Notes: Armored shores decrease available forage and over-winter habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas.		
Class	<i>Amphibia</i> (Amphibians)	SGCN Category
Species: <i>Ambystoma laterale</i> (Blue-spotted Salamander)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Loss and degradation of vernal pools and pocket swamps and the surrounding critical terrestrial habitat, especially in southern and central ME		
Class	<i>Aves</i> (Birds)	SGCN Category
Species: <i>Ammodramus savannarum</i> (Grasshopper Sparrow)		1
Severity: Moderate Severity	Actionability: Highly actionable	
Notes: Airfield management practices		
Species: <i>Ardea herodias</i> (Great Blue Heron)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Disturbance associated with human activity in developed areas can cause colony abandonment.		
Species: <i>Falco peregrinus</i> (Peregrine Falcon)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Protect important nesting and foraging habitat from residential and commercial development.		

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Class	<i>Aves</i> (Birds)	SGCN Category
Species: <i>Calidris pusilla</i> (Semipalmated Sandpiper)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss from development can be mitigated through environmental permit review.		
Species: <i>Bartramia longicauda</i> (Upland Sandpiper)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Airfield mowing practices		
Species: <i>Hylocichla mustelina</i> (Wood Thrush)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and or fragmentation to development		
Class	<i>Bivalvia</i> (Marine And Freshwater Molluscs)	SGCN Category
Species: <i>Alasmidonta varicosa</i> (Brook Floater)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: In riparian zone where forest canopy is lost or degraded and/or water quality is impacted; in stream bed where increased access/use directly impacts stream bottom and/or water quality		
Species: <i>Leptodea ochracea</i> (Tidewater Mucket)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: In riparian zone where forest canopy is lost or degraded and/or water quality is impacted; in stream bed where increased access/use directly impacts stream bottom and/or water quality		
Species: <i>Lampsilis cariosa</i> (Yellow Lampmussel)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: In riparian zone where forest canopy is lost or degraded and/or water quality is impacted; in stream bed where increased access/use directly impacts stream bottom and/or water quality		
Class	<i>Insecta</i> (Insects)	SGCN Category
Species: <i>Chaetagnela cerata</i> (A Noctuid Moth)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Bombus pensylvanicus</i> (American Bumble Bee)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation		
Species: <i>Bombus ashtoni</i> (Ashton's Cuckoo Bumble Bee)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation		
Species: <i>Speranza exonerata</i> (Barrens Itame)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Metarranthis apiciaria</i> (Barrens Metarranthis Moth)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Hemileuca maia maia</i> (Eastern Buckmoth)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		

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Class	<i>Insecta</i> (Insects)	SGCN Category
Species: <i>Satyrrium edwardsii</i> (Edwards' Hairstreak)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat restricted to southern ME where loss and fragmentation to development is on-going		
Species: <i>Callophrys hesseli</i> (Hessel's Hairstreak)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: At least one site is proximate to commercial development		
Species: <i>Bombus insularis</i> (Indiscriminate Cuckoo Bumble Bee)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation		
Species: <i>Zanclognatha martha</i> (Pine Barrens Zanclognatha)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Citheronia sepulcralis</i> (Pine Devil)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Psectraglaea carnosae</i> (Pink Sallow)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Species: <i>Bombus affinis</i> (Rusty-patched Bumble Bee)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation		
Species: <i>Erynnis brizo</i> (Sleepy Duskywing)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat restricted to southern ME where loss and fragmentation to development is on-going		
Species: <i>Lycia rachelae</i> (Twilight Moth)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME		
Class	<i>Mammalia</i> (Mammals)	SGCN Category
Species: <i>Sylvilagus transitionalis</i> (New England Cottontail)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: NEC can exist in industrial areas if shrub habitat is maintained. However, management of this land is seldom coordinated or done intentionally to benefit NEC. Currently, industrial development is occurring in prime NEC areas and may lead to further loss of habitat.		
Class	<i>Merostomata</i> (Horseshoe Crabs And Sea Scorpions)	SGCN Category
Species: <i>Limulus polyphemus</i> (Horseshoe Crab)		1
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Armored shores decrease availability of mating, egg-laying, larval development, and forage habitat. Spatial extent is fairly low (confined to a few areas), but is substantial in those areas. Actionability is moderate, i.e., can be minimized in newly developing areas.		
Class	<i>Reptilia</i> (Reptiles)	SGCN Category

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Class	<i>Reptilia</i> (Reptiles)	SGCN Category
Species: <i>Emydoidea blandingii</i> (Blanding's Turtle)		1
Severity: Severe	Actionability: Moderately actionable	
Notes: Habitat loss, degradation, and fragmentation from development and increased human activity		
Species: <i>Thamnophis sauritus</i> (Eastern Ribbon Snake)		2
Severity: Moderate Severity	Actionability: Moderately actionable	
Notes: Habitat loss and fragmentation from development		
Species: <i>Coluber constrictor constrictor</i> (Northern Black Racer)		1
Severity: Severe	Actionability: Moderately actionable	
Notes: Habitat loss from development and associated fragmentation and anthropogenic activities are substantial threats		
Species: <i>Clemmys guttata</i> (Spotted Turtle)		1
Severity: Severe	Actionability: Moderately actionable	
Notes: Habitat loss, degradation, and fragmentation from development and increased human activity		

Habitats Associated With This Stressor:

Macrogroup	Agricultural
Habitat System Name: Pasture-Hay	
Notes: Development of farmland higher in southern, central, and coastal ME; industrial development probably lower stressor than residential	
Macrogroup	Boreal Upland Forest
Habitat System Name: Acadian Low Elevation Spruce-Fir-Hardwood Forest	
Notes: Impacts likely lower than forest types in southern and central ME	
Habitat System Name: Acadian Sub-boreal Spruce Flat	
Notes: Impacts likely lower than forest types in southern and central ME	
Habitat System Name: Acadian-Appalachian Montane Spr-Fir-Hwd Forest	
Notes: Impacts likely lower than forest types in southern and central ME	
Habitat System Name: Boreal Jack Pine-Black Spruce Forest	
Notes: Impacts likely lower than forest types in southern and central ME	
Macrogroup	Central Hardwood Swamp
Habitat System Name: North-Central Interior Wet Flatwoods	
Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.	
Macrogroup	Central Oak-Pine
Habitat System Name: Central Appalachian Dry Oak-Pine Forest	
Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; Central Oak Pine had among the highest rates of predicted development in Anderson et al (2013)	
Habitat System Name: Central Appalachian Pine-Oak Rocky Woodland	
Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; Central Oak Pine had among the highest rates of predicted development in Anderson et al (2013)	
Habitat System Name: North Atlantic Coastal Plain Hardwood Forest	
Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; Central Oak Pine had among the highest rates of predicted development in Anderson et al (2013)	

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Macrogroup Central Oak-Pine

Habitat System Name: North Atlantic Coastal Plain Maritime Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; Central Oak Pine had among the highest rates of predicted development in Anderson et al (2013)

Habitat System Name: Northeastern Interior Pine Barrens

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; Central Oak Pine had among the highest rates of predicted development in Anderson et al (2013)

Macrogroup Coastal Grassland & Shrubland

Habitat System Name: Northern Atlantic Coastal Plain Dune and Maritime Grassland

Notes: Many dunes have been and continue to be impacted, despite some legal protections

Habitat System Name: Northern Atlantic Coastal Plain Sandy Beach

Notes: Many dunes have been and continue to be impacted, despite some legal protections

Macrogroup Coastal Plain Peat Swamp

Habitat System Name: North Atlantic Coastal Plain Basin Peat Swamp

Notes: Many AWC Swamps are conserved, but those in private ownership remain vulnerable due to relatively high development in southern and coastal ME

Macrogroup Emergent Marsh

Habitat System Name: Laurentian-Acadian Freshwater Marsh

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Macrogroup Glade, Barren and Savanna

Habitat System Name: Central Appalachian Alkaline Glade and Woodland

Notes: Many areas have been conserved, but private lands remain vulnerable to development

Macrogroup Intertidal Gravel Shore

Habitat System Name: High Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area and functions

Habitat System Name: Lower Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area and functions

Habitat System Name: Mid-Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area and functions

Macrogroup Intertidal Sandy Shore

Habitat System Name: Sand Beach

Notes: Shoreline development can introduce foot and car traffic, pets, noise, light, and trash that can degrade habitat area and functions

Habitat System Name: Sand Flat

Notes: Shoreline development can introduce foot and car traffic, pets, noise, light, and trash that can degrade habitat area and functions

Habitat System Name: Submerged Aquatic Vegetation

Notes: Shoreline development can introduce foot and car traffic, pets, noise, light, and trash that can degrade habitat area and functions

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Macrogroup Intertidal Tidal Marsh (peat-forming)

Habitat System Name: Acadian Coastal Salt Marsh

Notes: Runoff from adjacent development may add excess nutrients, sediment, heavy metals, etc.

Habitat System Name: Coastal Plain Tidal Marsh

Notes: Runoff from adjacent development may add excess nutrients, sediment, heavy metals, etc.

Macrogroup Northeastern Floodplain Forest

Habitat System Name: Laurentian-Acadian Floodplain Systems

Notes: Floodplain forests (and adjacent uplands) had relatively high predicted development rates in Anderson et al (2013)

Macrogroup Northern Hardwood & Conifer

Habitat System Name: Appalachian (Hemlock)-Northern Hardwood Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Northern Hardwoods Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Pine-Hemlock-Hardwood Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Red Oak-Northern Hardwood Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME

Macrogroup Northern Swamp

Habitat System Name: Acadian-Appalachian Conifer Seepage Forest

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Laurentian-Acadian Alkaline Conifer-Hardwood Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: North-Central Appalachian Acidic Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: North-Central Interior and Appalachian Rich Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Northern Appalachian-Acadian Conifer-Hardwood Acidic Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Macrogroup Outcrop & Summit Scrub

Habitat System Name: Laurentian-Acadian Calcareous Rocky Outcrop

Notes: cellphone and other tower development

Habitat System Name: Northern Appalachian-Acadian Rocky Heath Outcrop

Notes: cellphone and other tower development

Macrogroup Rivers and Streams

Habitat System Name: Ephemeral

Notes: Impacts likely, but hard to quantify since most ephemeral streams are not mapped

Habitat System Name: Headwaters and Creeks

Notes: Impacts likely, but hard to quantify since most ephemeral streams are not mapped

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Macrogroup Rivers and Streams

Habitat System Name: Small River

Macrogroup Ruderal Shrubland & Grassland

Habitat System Name: Introduced Shrubland

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are probably more at risk than blueberry barrens

Habitat System Name: Powerline Right-of-Way

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are probably more at risk than blueberry barrens

Habitat System Name: Ruderal Upland - Old Field

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are probably more at risk than blueberry barrens

Macrogroup Wet Meadow-Shrub Marsh

Habitat System Name: Introduced Wetland and Riparian Vegetation

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Laurentian-Acadian Wet Meadow-Shrub Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

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The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.